IN THE CLAIMS:

Please cancel claims 32-84 without prejudice.

Claims 32 - 84 (Cancelled)

85. (Previously Presented) A method of depositing a metal on a substrate having one or more features formed thereon, comprising:

applying a first biasing voltage to the substrate while immersing the substrate into an electrolyte solution contained in an electrolyte container comprising an anode immersed in the electrolyte solution, wherein the first biasing voltage is configured to generate a current that increases over time as the substrate is introduced into the electrolyte solution; and

applying a plating voltage to the substrate once the substrate has been immersed into the electrolyte solution.

86. (Previously Presented) The method of claim 85, wherein the current is a ramping current.

87. (Previously Presented) The method of claim 85, wherein the first biasing voltage is about 0.8 volts.

88. (Previously Presented) The method of claim 85, wherein the first biasing voltage is configured to limit etching by the electrolyte solution of a seed layer disposed on the one or more features formed on the substrate as the substrate is being immersed into the electrolyte solution.

89. (Previously Presented) The method of claim 94, wherein the first biasing voltage and the second biasing voltage are applied for about 0.25 seconds to about 5 seconds.

90. (Previously Presented) The method of claim 85, wherein the first biasing voltage ranges from about 1 volt to about 5 volts.

91. (Previously Presented) The method of claim 85, wherein the electrolyte solution is acidic.

92. (Previously Presented) The method of claim 85, wherein applying the plating voltage step comprises applying a pulsed biasing voltage to the substrate.

93. (Previously Presented) A method of depositing a metal on a substrate having one or more features formed thereon, comprising:

applying a first biasing voltage to the substrate while immersing the substrate into an electrolyte solution contained in an electrolyte container comprising an anode immersed in the electrolyte solution, wherein the first biasing voltage is configured to generate a current that increases over time; and

applying a positive plating current alternated with a negative de-plating current, the positive plating current being configured to cause deposition of metal inside the features, the negative de-plating current being configured to keep each opening of the features open while the metal is being deposited inside the features by the positive plating current.

94. (Previously Presented) A method of depositing a metal on a substrate having one or more features formed thereon, comprising:

applying a first biasing voltage to the substrate while immersing the substrate into an electrolyte solution contained in an electrolyte container comprising an anode immersed in the electrolyte solution, wherein the first biasing voltage is configured to generate a current that increases over time;

applying a second biasing voltage to the substrate after applying the first biasing voltage, the second biasing voltage being configured to attract metal ions contained in the electrolyte solution near the features; and

applying a plating voltage to the substrate once the substrate has been immersed into the electrolyte solution.

95. (Previously Presented) A method of depositing a metal on a substrate having one or more features formed thereon, comprising:

applying a first biasing voltage to the substrate while immersing the substrate into an electrolyte solution contained in an electrolyte container comprising an anode immersed in the electrolyte solution, wherein the first biasing voltage is configured to generate a current that increases over time;

applying a plating voltage to the substrate once the substrate has been immersed into the electrolyte solution; and

applying a second biasing voltage to the substrate after applying the first biasing voltage but prior to applying the plating voltage, wherein the second biasing voltage is configured to attract metal ions contained in the electrolyte solution near the features and wherein the second biasing voltage is higher than the plating voltage.

96. (Previously Presented) A method of depositing a metal on a substrate having one or more features formed thereon, comprising:

applying a first biasing voltage to the substrate while immersing the substrate into an electrolyte solution contained in an electrolyte container comprising an anode immersed in the electrolyte solution, wherein the first biasing voltage is configured to generate a ramping current; and

applying a pulsed biasing voltage to the substrate once the substrate has been immersed into the electrolyte solution.

97. (Previously Presented) A method of depositing a metal on a substrate having one or more features formed thereon, comprising:

applying a first biasing voltage to the substrate while immersing the substrate into an electrolyte solution contained in an electrolyte container comprising an anode immersed in the electrolyte solution, wherein the first biasing voltage is configured to generate a ramping current; and

applying a positive plating current alternated with a negative de-plating current, the positive plating current being configured to cause deposition of metal inside the features, the negative de-plating current being configured to keep each opening of the features open while the metal is being deposited inside the features by the positive plating current.

98. (Previously Presented) The method of claim 85, wherein the first biasing voltage is negative relative to the anode.

99. (Previously Presented) The method of claim 85, wherein the current increases as the percentage of substrate immersed into the electrolyte solution increases.

100. (Previously Presented) The method of claim 85, wherein the first biasing voltage comprises a negative voltage that is calculated to limit etching of a seed layer formed on the substrate by the electrolyte solution.

101. (Previously Presented) The method of claim 85, wherein the first biasing voltage comprises a negative voltage configured to deposit metal onto the substrate at a first deposition rate, the first deposition rate being greater than an etching rate of the electrolyte solution.